**BREAKING NEWS BULLITEN:**

I am sure many of you have heard by now that NASA has indeed made contact with some kind of alien species from a nearby nebula. Thankfully, it appears that our language systems—with a few hiccups—are somewhat compatible and both parties are very eager to start sharing the knowledge of our worlds. All professions and persons are asked to participate as best they can in this worldwide effort.

Our district has been asked to look some of the different plants endemic to the area, to contribute to a large whole of all plant life endemic to North America.

Using the skills we have learned in our classification unit as well as what we know of plants, your task is to make an **herbarium** of at least **5 entries from different families** to contribute to the class herbarium.

An herbarium entry consists of the following:

* A dried specimen with
  + Flower (if applicable)
  + Seed structure (if applicable)
  + Leaf structure
  + Stem structure (entirety or a portion)
  + Root structure (entirety or a portion)
* The common name of the specimen
* The scientific name of the specimen
* The family name of the specimen

Also, a short list of defining characteristics of your herbarium’s families is expected for each entry. These should be plants endemic to the area, rather than from your Aunt’s flower bed.

\*\*More details and specifications on how to dry and preserve plants will be covered in our plant-pressing workshop.

--In addition, all students are expected to compose a letter to the aliens, expanding on reasons why these specimens ought to be preserved and thus why this planet ought to be preserved (just in case they aren’t as friendly as they seem). One letter will be chosen from the class to send with our herbarium.

To further the alien’s understanding, include a graphic of where these plants might fall in a phylogenetic tree, including some of the larger categories that all plants might fit into.

THE BREAKDOWN:

1. Five herbarium entries
   1. Dried components
   2. Properly named and identified
   3. Details about the plant family
   4. A picture of each plant prior to its drying
2. A letter to the aliens, explaining why these plants (and the planet they live on) are worth preserving
3. An explanation with a graphic of where these plants are in relative classification, including cladistic representation and what larger categories of life they happen to fall into
4. An attractive and cohesive container (box, binder, etc) that keeps everything together

Objectives:

TSWBAT

* Report different characteristics of different plant families.
* Recognize and identify different parts of plant structure.
* Properly handle and display structural components of the plant samples.
* Use dichotomous keys and other resources to correctly identify their plants.
* Create a mock-up cladogram of where his or her plants fit together.
* Defend the merits of diversity in plant life, if only to save the planet.